Fooling the Bladder Cops: The Complete Drug Testing Guide

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Chapter 1

Introduction

During a job interview, have you ever been asked to piss for your new employer? New applicants for many of the Fortune 500 corporations are now being forced to take a drug test. Drug byproducts can be detected in urine, blood, hair, external residue, and even perspiration! Drugs aren't the only things they test for; employers are using urinalysis to test women for pregnancy. Pregnant women are getting laid off or denied employment after taking such a test. Parents are spying on their children. The DOD Directive requires the military to screen all active duty members annually. If you don't want to be a victim of the drug war, this text will help you. If you are well known, this text may protect your reputation. I strongly recommended that drug users (pot smokers in particular) read this. Other drugs are covered as well, but marijuana is the main focus of this paper.

Chapter 2

Detection Times

Drug tests detect drugs as well as metabolites. Metabolites are the byproducts of a substance after it has run through your system. To determine whether you will pass or not, it is important to know how much of the illicit metabolites are in your urine and how much is tested for. Table 2.1 will give you an approximation; however, it varies depending on a number of factors. The substance being tested, testing method, and levels tested for are major factors.

2.1 Halflife of TetraHydraCannabinol

The halflife of THC concentration ranges between 0.8 to 9.8 days. There is too much human variation to even approximate how long THC will be detected in the urine of an individual. Infrequent users with a fast metabolism will have the shortest detection time. Frequent users with a slow metabolism will have long detection times. The only way to estimate a detection time is to consider the lower and upper bounds (3-45 days), and decide based on the factors I've mentioned.

2.2 Approximate Detection Times of Various Substances

Substance	*Approximate Detection Time* [9]
Amphetamines	2-4 days
Barbituates (Short-Acting) [1]	1 day
Barbituates (Long-Acting) [2]	2-3 weeks
Benzodiazepines	3-7 days
Cannabinoids	3-45 days
Clenbuterol [3]	2-4 days [4]
Cocaine	2-4 days
Codeine	2-5 days
Euphorics (MDMA, psilocybin)[5]	1-3 days
LSD[6]	1-4 days
Methadone	3-5 days
Methaqualone	14 days
Nicotine	? [7]
Opiates	2-4 days
Peptide hormones [3]	undetectable
Phencyclidine (PCP)	2-4 days
Phenobarbital	10-20 days
Propoxyphene	6 hours to 2 days
Steroids [3] [8] (anabolic oral)	14 days
Steroids [3] [8] (anabolic parenterally)	1 month

Table 2.1: EMIT Detection Times of Substances in Urine

Try to call in sick on test day to delay one more day if possible; it will help.

Other factors determining degree of intoxication include:

- metabolism
- fluid intake
- tolerance
- frequency of intake of substance
- amount of substance
- potency of substance
- length of time you have been a user
- amount of body fat (for fat soluable substances such as THC)

2.2.1 Frequency of Intake

If you use marijuana on rare occasions, your urine may be clean of metabolites in less than a week. There is a common and strange phenomena that occurs with chronic users. You would expect a chronic user to have the longest detection time and the smallest chance of passing. This is not always the case. A chronic user with a high tolerance will eliminate drugs quicker than an occasional user. Chronic users have tested negative after a week long binge.

[1]for example: secobarbital

[2]for example: phenobarbital

[3]Performance Enhancers.

[4]0.5 ng/mL by GC/MS.

[5]By RIA and GC/MS only. Not Detectable by EMIT.

[6]Detectable by EMIT and RIA, but rarely tested. A lab will only test for LSD when specifically requested.

[7]No data available yet. I expect the detection time to be long because nicotine is fat soluble.

[8]By HPLC, RIA, and GC/MS. Not Detectable by EMIT.

[9]Detection times vary depending on analytical method used, drug metabolism, tolerance, patient's condition, fluid intake and method and frequency of ingestion. These are general guidelines only.

2.2.2 Amount of Body Fat

Lipid tissue also makes a huge difference. Skinny users not only have a faster metabolism (usually), but also lack storage for THC metabolites. Fat will cause a lag in excretion pattern, and lead to a longer detection time.

2.2.3 Predicting Detection Period

You should now be able to understand why an individuals detection time for THC is so unpredictable. Please don't post or e-mail a question "how long will it take..." This is the single most frequently asked question. Many people can't even begin to estimate a detection for their own bodys, let alone the unseen, unknown body of a internet explorer.

There is an inaccurate program that will plot a graph of time versus percentage of THC in your system given the days you've smoked. The program is called `CALC_THC.EXE` and can be found on the internet. `CALC_THC` cannot possibly be accurate because it doesn't have any way of measuring the potentcy of the weed, and it leaves metabolism out of the equation. (see 14.2.3)

2.3 Positive (defined)

50 nanograms of THC metabolites per milliliter defines a "presumptive positive" by NIDA certified labs. This value was originally 20 ng/mL, but too many false positives resulted. So the level was raised to 100 ng/mL to reduce false positives. As of January 1995, the threshold was lowered back down to 50 ng/mL because drinking water would easily bring a positive below 100 ng. Be aware that these cutoffs are not universally consistent. I recently heard of a lab using a 15 ng/mL cutoff! Table 2.2 details the thresholds for other substances.

All cutoff levels are in nanograms/mL

[1] These values apply specifically to Codeine and Morphine.

Substance	*Screening Cutoff*	*GC/MS Confirmation Cutoff*
Amphetamines	500	500
Methamphetamines	200	500
Barbituates	200	100
Cocaine	150	150
Marijuana	50	15
Opiates [1]	300	300
Phenyclidine	25	25

All

cutoff levels are in nanograms/mL

Table 2.2: Cutoff Levels

2.3.1 Passive smoke and positives

"Second hand marijuana smoke in a car can cause you to fail the next day" (Nightbyrd). It is possible that second hand [marijuana] smoke will raise someone to the 50 ng/mL level; however, **extreme** exposure is required. For instance, a closed car full of pot smokers and a non-smoker may render the non-smoker positive for both urinalysis and the hair test, provided that they are sealed in the car for a while. The Army did a case study where volunteers were put in a room pumped full of smoke for an hour, five times daily. Subjects started testing positive after the second day. The non-smoker would have to take in virtually as much second hand smoke as a smoker inhales. Non-smokers are safe in a ventilated area, as long as they don't get a hair test. According to Clinton, simply blowing crack smoke on ones hair may cause a positive hair test. Second hand pot smoke doesn't affect the hair test results as much as crack smoke does mainly because exhaled smoke contains no THC. The only pot smoke that contains THC is the smoke that hasn't entered the lungs.

2.4 Decreasing detection times

Increasing metabolism is probably the most effective way to decrease the time period that drugs can be detected in your system. Metabolism can be influenced by physical activity, diet, and drugs.

2.4.1 Physical Activity

Physical activity can increase your metabolic rate as much as two thousand percent! Nothing beats proper training taken to an extreme.

2.4.2 Diet

A high calorie diet is the next best way to increase metabolism. Consuming mass quantities of high calorie food will increase metabolic rate by up to 10 percent. On the contrary, a malnutritious (light) diet could lower your metabolism by 10 percent.

2.4.3 Using Drugs to Reduce Detection Times

Amphetamines will also increase metabolism. Unfortunately, labs usually test for speed, and could get you into trouble.

Chapter 3

Test Methods

Five different bodily substances can be tested to reveal illicit drugs:

- urine
- blood
- hair
- perspiration
- residue

Although this text mainly addresses urinalysis, I try to cover methods for beating all drug tests.

It would be helpful if people could somehow find out which test they are getting ahead of time. Though caution must be taken. Asking your boss whether you're getting an EMIT or GC/MS would imply that you know too much, or seem too curious. The law doesn't protect you from unjust hiring practices, and your boss to be may refuse you employment for any reason. If simply drinking a cup of water makes the boss feel uncomfortable, the verdict may be guilty before you even take the test.

3.1 Substances that are Detectable

An assay can be developed for any drug using GC/MS. Table 3.1 zindicates what can be dectected in screening tests.

Substance	*EMIT*	*RIA*	*HPLC*
Amphetamines	X	X	?
Antidepressants	X		?
Barbituates	X	X	?
Benzodiazepines	X	X	?
Cannabinoids	X	X	?
Carbamazepine	X		?
Cocaine	X		?
Ethanol	X		?
LSD		X	?
Methadone	X		?
Morphine		X	?
N-Acetylprocainamide	X		?
Opiates	X		?
PCP		X	?
Phenobarbital	X		?
Propoxyphene	X		?
Steroids		X	X
Theophylline	X		?

Table 3.1: Detectability of Substances on Screening Tests

3.2 DrugAlert

DrugAlert is a $19.95 home test kit enabling parents to test their children. This is the most inaccurate test being used, and it's also the newest. The test kit is a small brown pad giving off an Oxy pad odor. The [uninformed] parent wipes the child's clothes, books, and anything belonging to the child. Then the pad is sent to Barringer Technologies via mail. (Note that it's a felony to send controlled substances through the mail. If the sample is positive, Barringer Technologies is knowingly urging parents to break the law). The lab puts the pad in a microwave looking machine, which detects residue from seven different illicit drugs. The child fails the test if s/he uses drugs, or unknowingly comes in casual contact with a drug user. Simply borrowing a pencil from a classmate that uses drugs will pass enough residue to render a positive test and an angry parent. When we have statistics like - 90% of all paper currency shows traces of cocaine, this test kit is quite foolish. Your only defense is to continually clean everything you touch with disinfectants.

3.3 Gas Chromatography

Defined by Thein and Landry:

> Gas chromatography uses a separation technique to divide the urine extracts into the component parts. An inert gas carries the urine through chromatographic columns, and the samples are separated by their boiling temperature and by their affinity for the column. Compounds are identified by separation time, called retention time. The retention time is unique and reproducible for each drug in a given chromotographic column.

3.4 Gas Chromatography / Mass Spectrometry

Defined by Thein and Landry:

> The most precise procedure for detection of banned substances is a combination of GC and MS. Gas chromatography/mass spectrometry is a two-step process, where GC separates the sample

> into its constituent parts, while MS provides the exact molecular identification of the compounds. Compounds are separated by GC and are then introduced, one at a time, into a mass spectrometer. As the sample constituents enter the MS, they are bombarded by electrons, which cause the compound to break up into molecular fragments. The fragmentation pattern is reproducible and characteristic, and is considered the "molecular-fingerprint" of a specific compound. Gas chromatography/mass spectrometry is considered to be the most definitive method for confirming the presence of a drug in the urine and is approximately 100 to 1,000 times more sensitive than TLC. Selective ion monitoring has been used to improve the GC/MS results. This procedure is the most costly, averaging approximately $200 per sample to test.

The GC/MS is typically used to confirm "positive" EMIT test results. GC/MS will indicate precisely what chemical is present. This is necessary because the EMIT will only indicate whether something **similar** to what's being tested was found. The GC/MS is difficult and more costly, which is why the EMIT is given first. (Hewlett Packard produces the GC/MS equipment, including computer, for about $50-75k depending on options.) Abstinence and substitution are the only ways to defeat the GC/MS test. GC/MS is very precise when done right. However, it's still subject to human error. For example, if the equipment isn't cleaned well, the previous test sample could get mixed with the next sample. According to Dr. Edward Cone, the GC/MS is 99 percent accurate; not very accurate on a large scale when you realize that 10 thousand out of every million will get false results. (more on accuracy in section 3).

3.5 Hair testing

When THC metabolites are in the blood, they go through the blood vessels in the head, and get filtered through the hair. THC metabolites remain in the hair as a permanent record. The hair test costs several hundred dollars ($150-300) and is rarely given because urinalysis is cheaper (approximately $65) and more accurate. (The hair test equipment and setup goes for over a million). According to Jeff Nightbyrd, hair tests are "widely used in the casino industry." They cut 50 strands of hair from the scalp, and send it in

to the testing lab where they liquefy it. "A hair sample is disolved in a series of solvents which extract the drug metabolites and then are analyzed via GC/MS." It can take from several hours to days just to extract metabolites. Average hair grows 1/4 inch per month. Typically they just use hair one and a half inches from the scalp; though some labs will take enough to test for up to 3 years. The liquid is run through the most sensitive GC/MS machines available, and can detect as little as 1 ng/mL! The hair test discriminates in that detection is easier in dark hair. Colored people may be discriminated against further because melanin is in their hair, which can be mistaken for THC. However, there is conflicting data as to whether melanin can be detected as THC. Psychemedics Corporation has a PDT90 kit for $75. This home test kit is for parents that want to chop off a lock of their child's hair to find out what drugs s/he is using. Kids- lock your bedroom doors at night if your parents don't trust your judgment on the drug issue.

Beating the hair test is extremely hard, and there are false positives. Bleaching or dying your hair is rumored to work, but it doesn't. I imagine you can shave every hair on your body and claim that you're a swimmer. According to NORML, Aloe Rid by Nexus is a shampoo that will aid in testing negative. Aloe Rid is available only in salons. Healthy Hair, from Sampson Health Products, is another shampoo designed to beat the hair test. Healthy Hair is sold in retail stores throughout Las Vegas. Keith Thrash from Sampson Health Products reccommends precleansing with Aloe Rid prior to using Healthy Hair. Healthy Hair is used in the morning and before going to bed. Each session takes 20 minutes. According to Steve at Sampson Health Products, two out of a thousand people failed the hair test when using Healthy Hair. Byrd Labs is currently developing a shampoo to defeat the hair test. Some have suggested treating hair with oil because THC is oil based and oil soluble. However, there is no proven way to beat the hair test, so it's all heresay and guessing at this point. (If anyone has any success with the shampoos or the swimmer excuse, please let me know). Swimming and washing your hair removes toxins, and Keith Thrash recommends doing both as much as possible. Fortunately, the hair test cannot be used alone as evidence because there are no forensic standards. It can only be used when substantiated by other evidence. Also, there are no intoxication standards. I believe if you tested positive for the hair test that you would probably have a good chance of fighting it. (BlockBuster Video uses the most up-to-date equipment, and passing such a test can be difficult). It takes several months of precleansing to beat the tests given by Psychemedics.

3.6 High Performance Liquid Chromatography

Usually used to detect anabolic steroids. Defined by Thein and Landry:

> High-performance liquid chromatography is similar to GC, except a liquid carries the sample through the chromotographic columns and the columns are not placed in a heated compartment. High-performance liquid chromatography is both sensitive and specific, and it is simpler and faster than GC. Gas chromatography and HPLC are reliable methods for screening, and they allow for simultaneous determination of a wide variety of different compounds. High-performance liquid chromatography is used to screen for urinary caffeine levels and has been used to confirm the positive results obtained from other screening techniques. Some steroids can be analyzed with this technique, whereas HPLC and GC lack appropriate sensitivity to detect beta-adrenergic blockers.

3.7 ImmunoAssay

This procedure is best described in Thein and Landry's word's:

> Immunoassays use antigen-antibody interactions to detect illegal substances. Antibodies that bind selectively to certain drugs or drug metabolites are chosen, and the sensitivity and the specificity of this test are only as good as the antibody chosen. The binding is proportional to the amount of drug in the urine and can be detected through enzymes, radioisotopes, or fluorescent compounds. With this technique, very small amounts of drug can be detected in a very small amount of urine, although this test may not differentiate between specific drugs within a class of drugs. Immunoassay has yielded false-positive results with some decongestants and nonsteroidal anti-inflammatory drugs. Radiommunoassay (RIA) and fluorescence polarization immunoassay (FPIA) are specific IA techniques currently being used. Radioimmunoassay can detect some 17 alpha-methyl, 17 alpha-ethyl,

and 19-nortestosterone steroids despite its low specificity. Immunoassay is both more sensitive and more specific than TLC.

3.7.1 Radio ImmunoAssay (aka AbuScreen)

"Of all the screening methods . . . (EMIT, TLC, RIA), RIA is the best method available." The RIA test is applied the same way as the EMIT. "The only difference btw RIA and EMIT is that RIA uses radioactive iodine as the detection mechanism rather than an enzyme NAD/NADH rxn which is detected by a scintillation counter" [Anon1]. The scintillation counter is used to measure the amount of radioactive particles present. Radioactivity is inversely proportional to metabolite level. RIA tests are a little more sensitive than the EMIT, and harder to beat. The most known user of the RIA test is the US government; in particular, the US military. The EMIT is more common because RIA produces radioactive waste, and radioactive waste is difficult to deal with. The US government uses RIA because a "company gives the government the instrumentation free in exchange for buying their reagents (reagent rental contract)." Some non-government labs use the RIA, so don't be surprized if your pre-employment screening is a RIA rather than an EMIT.

3.7.2 Enzyme Multiplied Immunoassay Technique

The EMIT is the cheapest, easiest to perform, and most common; also the easiest to fail. It's the easiest to pass if you're well informed (ie. reading this text). Most pre-employment screens will give you the EMIT first; though some businesses will surprise you with a GC/MS test up front (discussed later). Unfortunately, there is no standard procedure to expect. (One who has read this file and is well informed may still fail because of the random nature of drug testing labs.) If you don't know which urinalysis will be administered, focus on beating the EMIT. If you pass the EMIT, you're off the hook. If you fail the EMIT, they'll give you the confirmation GC/MS test, which is extremely sensitive. Lewis Maltby, director of the Workplace Rights Office, said the EMIT test is wrong 25 to 30 percent of the time.

3.7.3 Fluorescence Polarization ImmunoAssay

No information yet available on this test.

3.8 PharmChek

A band-aid type patch is worn for a week or more to absorb perspiration. If illicit drugs are used during the time the sweat patch is worn, the patch will be positive when the lab tests it. The patch has a tamper-proof design - no thanks to 3M, who manufactures the patches. (Don't sweat it; we'll find a way to tamper with the silly patch :) PharmChem Laboratories Inc. created the patch, and got market approval from the FDA. The FDA permitted the patch for detecting cocaine, amphetamines, and opiates. They are working on getting FDA clearance to use the patch to test for marijuana and PCP. The FDA already gave permission to use it in the workplace. PharmChem will sell the patch to law enforcement and drug rehabilitation agencies in 1996. Accuracy of the sweat patch remains unknown. No one has disclosed any information reguarding how inaccurate this test is. Bad lab procedure is a very big problem in the testing industry, and it's hard to tell how prone to human error the sweat patch test is.

3.9 TestCup

No details available yet. This new test by Roche involves urinating into a cup, where the cup has an indicator on the side displaying what drugs are positive.

3.10 Thin Layer Chromatography

TLC "involves adding solvent to urine to extract drugs and then comparing color spots on a TLC plate to that of a standard" (Nightbyrd). Accuracy is very poor, and this test is rarely used. A TLC kit called ToxiLab is available. This kit has been abandoned for the most part, since EMIT has been improved. Fortunately, it's not used for confirmation anymore. Thein and Landry's definition:

> Thin-layer chromatography testing is based on the differences in the migration rate of various substances through a porous supporting medium. The degree of migration and the color are characteristic of certain drugs. Thin-layer chromatography can demonstrate the presence of a drug, but this procedure cannot

specify the quantity of drug present. This technique is both time consuming and nonspecific, and provides only a positive or negative response. Thin-layer chromatography is capable of detecting only a limited number of substances 12 to 24 hours after ingestion, resulting in a high number of false-negative results.

Chapter 4

Test Standards and Accuracy

The accuracy of drug testing is an area where I have decided to neglect all statistics. Those who oppose drug testing provide numbers indicating a high level of false positives. Those who favor drug testing provide numbers indicating high levels of accuracy. The fact is that accuracy varies widely from lab to lab. Generally speaking, NIDA labs are accurate. Clinton writes:

> NIDA (The National Institute of Drug Abuse) is the government organization responsible for regulating the drug-testing industry. The vast majority of urine drug screens done these days conform to NIDA specs, and ALL testing associated with the government (department of transportation, etc.) complies with the NIDA standard. It is NIDA that decides what the "safe" cutoffs are to avoid false positives....
>
> Despite what you might hear on the net, urinalysis, if done correctly, is a very accurate scientific procedure. I know of no labs that simply report the results of the initial EMIT screening without confirming the sample on GC/MS. The fact is, labs WANT you to test negative, because then they only have to run an EMIT test on your urine (a few cents). If you test positive, they must then confirm the positive result on GC/MS, which is considerably more expensive. . . . Incidentally, the machine which tests the hair is a relative of the GC/MS, but is FAR more precise. It can accurately detect levels of THC in a solution that are below 1 ng/mL!

CAP (College of American Pathologists) also certifies laboratories the way NIDA does. NIDA keeps it's labs in check by sending positive and negative double-blind samples. Lab personnel does not know what samples came from NIDA. If the lab results are wrong, NIDA may take away the labs certification. Only labs that perform the GC/MS on site can be NIDA certified. Labs that send samples to another laboratory for GC/MS confirmation are ineligible for NIDA certification. "Drug testing when done properly with all required controls and confirmation procedures is very accurate and reliable" [Anon1].

Not all labs are NIDA/CAP certified. Some labs do not properly and thoroughly clean the GC/MS equipment. Some labs do not even do a GC/MS confirmation! Some labs use cheap alternative methods to reduce expenses.

Many human errors occur in labs and cause inaccurate results. Some are careless or irresponsible errors, and some errors are accidents. Human error can ruin the results of ANY test, screening or confirmation GC/MS.

The only lab you should be concerned with is the one that is testing you. Only federal jobs require NIDA standards. Your typical private employer may use any lab s/he chooses, which would very likely be the least expensive. Businesses don't always choose NIDA labs that follow-up a positive screening test with a confirmation GC/MS.

4.1 Procedures Implemented

In the workplace, an EMIT screening is typically used, with a CG/MS confirmation if the EMIT is positive. However, this is not a rule; employers can, and some do, use unusual procedures. Some employers use the RIA, and some use the hair test. The government often uses RIA. They may or may not supervise the subject. Olympic athletes must be monitored by courier after a competition. The courier stays with the athlete until the athlete urinates, with a time frame of up to sixty minutes.

4.2 False Positives

No laboratory process is completely free from error. The GC/MS test is virtually error free, but the EMIT is far from accurate. There are some false positives you should avoid if you're getting an EMIT test. Take this

seriously; false positives run high. If you know that there will be a GC/MS confirmation test, you can disregard this section. It would be too lengthy to list all of the false positives here. Jeff Nightbyrd's "Conquering the Urine Tests" pamphlet lists a majority of the false positives in detail. (If you are clean, want to get back at the testing industry for conducting these absurd tests, and know that there will be a confirmation test, you could consume several false positives. This would force labs to pay for the high priced GC/MS test, eventually drive up test expenses. You will still pass the test as long as you do not use any true positives.)

4.2.1 Ibuprofen

Ibuprofen is a common pain reliever that (even in low dosages) used to cause a false THC positive on the EMIT test. The EMIT has been changed to use a different enzyme to eliminate false positives due to Ibuprofen. Ibuprofen in very high doses will still interfere with both the EMIT and the GC/MS. There is some conflicting data here because some sources say that the GC/MS tests can distinguish between Ibuprofen and THC (as well as other over-the-counter drugs).

4.2.2 Cold Remedies, Pain Relievers, Hay Fever Remedies, and Diet Pills

Decongestants and diet pills result in false positives for amphetamine use in one third of the test samples given to 40 of the countries leading laboratories. There are roughly 300 over-the-counter drugs that cause false positives on the EMIT.

4.2.3 Antibiotics

Certain antibiotics (like Amoxicillin) are claimed to cause a positive for heroin or cocaine. My expert source was unable to verify this, so I regret that there is some uncertainty here.

4.2.4 Melanin (found in black skin)

Melanin is the brown pigment that protects your skin from UV rays. It was raised as a discrimination issue in the 1980's, and argued that melanin's

molecular structure is similar to that of a THC metabolite. Subsequent research revealed flaws in the data. Melanin was found to have no effect on THC metabolite testing.

4.2.5 DHEA

DHEA taken by AIDS patients will cause a false positive for anabolic steroid use.

4.2.6 Dental Treatment

Caine products (like novacaine) used in dentistry have been known to cause false positives for cocaine.

4.3 True Positives (legitimate)

Some legal products actually contain small amounts of illegal chemicals. All tests, including the GC/MS, will test you positive because the metabolites derived from the true positive are identical to the metabolites of the illegal drugs. One exception: poppy seeds will not cause a positive GC/MS (explained below).

4.3.1 Poppy Seeds

Poppy seeds, usually on breads, contain traces of morphine, and lead to positives for opiates. According to Dr. Grow, eating a pastry filled with poppy seeds will bring results showing that you are a *high level* opiate user. Harold Crossley, a nationally known chemical dependency expert, said you would have to eat 100 poppy seed bagels to score a positive on a drug test. When taken into account that very few poppy seeds are sprinkled on bagels, you can see that poppy seeds from a hundred poppy seed bagels will easily fill a single large pastry. Purim cookies, a Jewish food known as Hamantashen, may have five to six tablespoons of poppy seeds. A couple Purim cookies may cause a positive test. Poppy seeds can be distinguished from illicit drugs on the GC/MS test. Although poppy seeds have the same metabolites as opium, these metabolites are shown to have different patterns when viewed with the GC/MS.

4.3.2 Testosterone Supplements

Orchic extract (found in bull's balls) will give a positive for anabolic steroid use. It is a legitimate substance that causes the test to imply that you abuse steroids.

Chapter 5

Commercial Products vs. Household Products

When I refer to "commercial products," I am talking about substances that were are sold specifically for beating drug tests. Household products is everything else (ie. bleach or water). Some people object to using commercial products because they are just another instance of someone trying to cash in on the "War on Drugs." And that is my attitude when it comes to ineffective commercial products, however, I praise the ones that work.

Commercial products are pricey and water alone tends to work for most. I have put a (c) next to the commercial products to indicate that they are developed specifically for beating the test. Those that oppose them or live in restricted areas (discussed below) can skip items with a (c).

5.1 Commercial Products and the Law

The state of Texas outlawed products which are sold for the sole purpose of creating negative results on urine tests. Texas is the only state to my knowledge that has the ban.

5.2 Money-back Guarantees

Ignore money-back guarantees. Companys that market to thousands of High Times readers make so much, that a few returns from motivated users are

insignificant. People could even get away with offering a money-back guarentee for Goldenseal because all the water that people are instructed to drink with Goldenseal causes most of them to pass. Some companys do not keep their word. A urinator who tested positive sent the lab results back, only to be told that marijuana is illegal. He was not even compensated for buying a failing product.

Chapter 6

Things Tested to Detect Counter Measures

Laboratories know how easy it is to tamper with urine samples and alter the results. Labs often test to find out if the sample is legitimate.

6.1 Color

If a urine sample looks clear, the lab will suspect that it is watered down. They cannot report it as positive, but they may reject the sample and inform your employer that you tried to beat the test. If this happens, the sample might as well be positive, because you won't get hired. Take vitamin B complex to color your urine yellow.

6.2 Temperature

Urine should be between 91 and 97 degrees. NIDA certified labs will verify temperature. If the sample is out of the accepted temperature range, they will suspect you added water to the cup, or used substitution. Disposable pocket hand warmers (sold in department stores) will keep a urine sample warm, provided that the urine is in a condom or douche bag.

6.3 Creatinine

Creatinine is a substance produced by vertebrates, and it shows up in urine. If someone substitutes their urine with something other than urine, like Mountain Dew, they will test negative for drugs. However the testee will most likely not get away with it because Mountain Dew contains zero creatinine, and labs test creatinine levels to ensure that the sample is valid. Creatinine levels drop below normal when people dilute their urine. This tests to ensure that the subject did not drink unusual amounts of water. An *accurate* creatinine "clearance" test would require a urine and blood test 24 hours before the drug test to determine the normal creatinine level for that individual. This is almost never done. You should still be cautious because they do often use the inaccurate method of comparing your creatinine level during the drug test to an average. People who are drug-free sometimes lose their jobs for having too low of a creatinine level.

6.3.1 How to Increase Creatinine Levels

Eating foods rich in protein like red meat will slightly increase creatinine levels. There is no significant variation between vegatarians and armavors, so the effect protein has is little. Sexual activity also raises creatinine levels. I doubt sexual activity influences creatinine level with much significance. However, a vegetarian that does not have much sex should be concerned.

6.4 pH

pH is often changed when people spike their sample with household products. Use caution when doping urine, pH is usually tested.

6.5 Specific Gravity

An unusual specific gravity indicates that a sample has been tampered with.

6.6 Age

Age can not be tested using urine. There is a rumor that approximate age can be detected in urine, and is tested in medical insurance exams. It's a myth.

6.7 Gender

Gender cannot be tested either. As with age, there is a rumor that gender can be detected in urine, and is tested in medical insurance exams. This is another myth. It may be argued that a pregnancy test can be used to detect the gender of the urine provider, but the same test is used to detect prostate cancer in males.

Chapter 7

Producing Clean Urine

THC is fat soluble, and it gets stored in your fat cells. Cleaning it out of your lipid tissue is very difficult. Many herbal products claim to clean out your system, yet they do nothing to remove THC byproducts from fat cells. A study was done in Germany in 1993 on 50 of the most common herbs used by people trying to pass the test. All 50 herbs failed to cause a negative.

Unfortunately, this rumor will not die. Goldenseal is useless; yet it's the most common thing for people to use. The only way to extract THC from fat cells is to exercise (5.8). Fat cells secrete fat with THC metabolites at a constant rate, regardless of what herbs you consume. You may be able to temporarily rid THC metabolites from your bloodstream, or dilute your fluids to yield a larger urine/THC ratio, but your bloodstream will continue collecting THC metabolites from fat. Your urine will continue collecting THC metabolites from your bloodstream.

7.1 Dilution

Hyper saturating your body with fluids will dilute metabolites possibly below the 50 ng/mL threshold, depending on your metabolism. Be aware that creatinine levels are often tested, and will show that the sample has been diluted. Diluting your sample will also produce clear urine, with virtually no yellow color. They will assume that you've diluted your sample, and they may reject your sample on the basis of color alone. It's only necessary to start drinking just before the test. Those who drown themselves in fluid days before a test are only causing unnecessary discomfort. Those who stay up

all night drinking don't have any better chance than one who drinks heavily first thing in the morning. Get up early if the test is early, but don't lose sleep over a test that is given in the daytime.

7.2 Water

Drink at least eight hefty glasses of fluid (preferably water) just prior to the test. Many people start drinking water several days before the test; which is useless. Water does *not* clean any THC metabolites out of your system because THC is not water soluble. Water only dilutes urine temporarily. Do not over do it; you can get water intoxication. People can actually overdose and even die from water intoxication. It's very hard to do, and you'll vomit before anything gets serious.

7.3 Creatinine Level

Eating red meat will boost creatinine levels. If you eat a lot of red meat for the 3 days prior to the test, your creatinine level will be normal, and the lab won't know that you've diluted your urine sample.

7.4 Vitamin B

Color your sample yellow by taking 50 to 100 milligrams of vitamin B. Many vitamins will work, but B-2 or B-12 (found in B-complex vitamins) are the most effective, though some will argue that vitamin C is better. This will also help if you plan to dope your sample (section 7). This does not guarantee that dilution will work. Diluted samples have been red-flagged when specific gravity and creatinine levels are tested and below normal. If you're taking vitamins at the last minute, check to see if they're time release. If so, crush it up and consume the powder. Coloring your urine is not all that important because it is normal for people to have clear urine even when they don't consume much fluid.

7.5 Diuretics

Diuretics make people urinate frequently. Coffee, cranberry juice, beer, iced tea, herbal tea, and Pepsi are all good diuretics. Grapes are known to be very good diuretics. Diuretics without caffeine or alcohol are recommended because caffeine and alcohol have negative side effects. Cranberry juice is also the cheapest. Avoid salts. Herbal diuretics do better than home remedies like juices.

7.5.1 Ultimate Blend (c)

This product used to be known as Test Free, but the name was changed. Ultimate Blend is a diuretic designed for the test, but works no better than other diuretics. Ultimate Blend is sold by Zydot Unlimited Inc.

7.5.2 Detoxify Carbo Clean (c)

This is a very new product, untested by a third party. It claims to absorb toxins, however, experts say that absorbing THC metabolites from fat cells is impossible. Here is a copy of the ad from Party Hut Enterprizes:

> [Detox] Is a scientifically formulated carbohydrate blend that works by absorbing toxins and imuurities[sic]. It has been featured in High Times, and we are so confident of the results that we are offering a double-your-money-back guarantee for any failed results. This is the most complete program for the cleanest results! Precleanse (tm) herbal capsules are enclosed in every box of Carbo Clean. This extra advantage helps you begin cleansing the evening before the deadline. B-Complex tablets complete the program.

7.5.3 Naturally Klean Herbal Tea (c)

Naturally Klean claims to clear any drug metabolites for a few hours after taking. Drink this shortly before the test. Naturally Klean was also listed as a drug screen in previous versions, but according to Nightbyrd, "it will do NOTHING to help you pass a urine test;" with the exception that it will dilute your urine. You can get Naturally Klean from Martha Butterfield-Jay

Foundation or J&J Enterprizes. An anonymous user provided the ingredients list: dandelion root, burdock root, red clover top, chamomile flower, alfalfa leaf, licorice root, slippery elm inner bark, hibiscus flower, dog rose hips, natural fruit flavors. Dandelion root is said to be the effective diuretic.

7.5.4 Goldenseal

Goldenseal is a plant and you can get either the root or the leaves in pill form. It's also a liquid or tea. The liquid is rumored to absorb slower than the capsules. Goldenseal is a diuretic, but works no better than other diuretics. Furthermore, NORML reports that Goldenseal is now being tested for. Taking Goldenseal is a foolish waste.

7.5.5 Certa or Certo

This is an untested diuretic. Certa "has something to do with canning. Some people swear by it. Trouble is, it's always somebody else, a third party not present during the conversation, who uses it" (Pearson). I've heard rumors about people who smoked right up to the day before the test, consumed fruit pectin (a canning substance similar to Certa), and passed the test. However, there hasn't been any tests to validate those claims. Will someone with a lab at their disposal please test this stuff?

7.5.6 Vales Original Formula

Another herbal remedy like Goldenseal. It does nothing. The water you must take with it does everything Vales claims to do.

7.5.7 Lasix

Take an 80 milligram dose of prescription diuretic lasix (furosemide). Prescription diuretics are the most potent. Some over the counter diuretics will color your urine blue and should be avoided. WARNING! -Diuretics can be harmful to people with kidney problems, pregnant women, and diabetics.-

7.6 Vinegar

There is a myth that drinking vinegar will mask drugs; it won't. However, vinegar lowers the pH of urine. Amphetamines are excreted up to 3 times as fast when urine is acidified. So vinegar could reduce the detection time period for amphetamines. The effects on detection time are generally insignificant, and it in my opinion it really wouldn't be worth it to drink vinegar. If you do decide to drink vinegar, I hear it's easiest to get a shot glass and do it in shots. It will cause diarrhea.

7.7 Dexatrim

There is a myth that taking phenylpropanolamine (Dexatrim's active ingredient) will work. It won't. In fact, Dexatrim is a false positive, and may work against you. The myth may have originated because Dexatrim was claimed to speed metabolism. However, the fact that Dextrim causes a positive makes it useless.

7.8 Fiber

A high fiber diet will help by redirecting fat soluble metabolites to the colon rather than bladder. "THC is eliminated primarily in the stool via bile acids. Both EMIT and RIA detect a secondary metabolite which is reabsorbed from the intestines. Thus a person with a high fiber diet will excrete a majority of THC [metabolites] in the stool" [Anon1]. A fiber-based laxitive will also help by binding bile-acids. Use caution. Fiber laxitives can alter one's bowel schedule and lead to dependancy.

7.9 Vitamin Lecithin

A recent method that's still under development is to take vitamin lecithin. This vitamin breaks down your stored fat and disperses it into your blood stream, to help clean out drugs that store themselves in lipid tissue, such as THC. NORML recommends taking Lecithin right up to the day of the test. To me it sounds as though this would work against you because by putting THC back in your blood stream, you are increasing metabolites in the urine.

Someone has suggested that you take vitamin lecithin on a regular basis to clean lipids of THC metabolites. Then quit before the test, which seems to make more sense. It MAY be useless to take lecithin supplements orally. I've been told that the digestive system breaks it down too much before entering the blood stream. Most aren't willing to take vitamins intravenously. (If you do decide to take lecithin, you might as well take B5 with it. B5 aids in the process of turning lecithin into acetylcholine.) Another solution is to take nutrients which help the body manufacture lecithin. Lipotrophics cause the liver to produce lecithin. A good source for this information is Austin Nutritional Research page.

7.10 How to Give A Clean Sample

Don't give urine from your first urination of the day. It's the dirtiest, and can be heavily filled with metabolites. Urinate a couple of times before giving a test sample. Also, don't give the beginning or end of the stream. Piss in the toilet, then quickly stop and go in the cup. Stop, and shift back to the toilet for the last portion. Only give a midstream sample. Just be sure to give 60 cc's.

7.11 Exercise

Athletes have a big advantage over normal civilians. When fat is burned, THC byproducts are released into the blood. This is the only way to get THC metabolites out of lipid tissue. "Normal living will burn them slowly, as your fat reserves get turned over" (Dr. Grow). Due to an athletes high metabolic rate, THC moves through an athletes system significantly faster. Exercising between drug tests will clean THC metabolites from the system at a faster rate, thus lowering the detection period. It is important to stop burning fat cells near test time. On test day, it doesn't matter what's in your lipid tissue. What's in your blood and urine does matter. Exercise increases the amount of THC metabolites in the urine; so quit exercising a week before the test. Be lazy, and eat big. This will put the body in an anabolic fat-storing stage. At this point, the "buried" THC metabolites won't escape and go the the urine. There are drugs that will increase metabolism the way exercise does, but these are the same drugs that they are usually testing for.

Exercise should only be considered when the subject knows that he or she will not be given a pop quiz in the near future.

7.12 Beta-2 Agonists

Studies have shown that Clenbuterol reduces fat, which would help rid lipid tissue of THC metabolities. Clenbuterol also increases metabolism. No studies have directly shown that Clenbuterol will help pass a drug test. However, provided that it reduces fat, I would assume that the fat breakdown would result in less fat soluble substances in the system. Caution: Clenbuteral is labeled as a performance enhancer, and it's on the banned list for athlete testing. If are being tested as an athlete, avoid Clenbuterol!

7.13 Beta-3 Agonists

Beta-3 agonists are drugs that stimulate the beta-3 andrenergic receptors on brown fat cells. The beta-3 andrenergic receptor is located on the surface of fat cells, and controls the amount of fat the cell releases into the bloodstream. When brown fat is stimulated, white fat is burned (converted into heat). Many people have mutant beta-3 andrenergic receptors, causing calories to be burned too slowly; thus leading to obesity. These people will benefit most from beta-3 agonist drugs. If the drug works as claimed, I believe it would reduce the detection time of fat soluble drugs by continually excreting metabolites into the bloodstream at a faster pace. As with vitamin lecithin and exercise, you would take beta-3 agonists between tests, and quit a couple days prior to the test. Beta-3 agonists have been in the development phase for the past 13 years. One firm is already testing a beta-3 drug in early clinical trials. It's not on the market yet.

7.14 Low Dosaging

If you're an athlete and get tested for steroids, you can still use anabolic steroids and possibly beat the cutoff. The body naturally produces testosterone (a steroid), and small amounts of testosterone show up in urine by default. Some athletes are able to keep their steroid intake low enough to

indicate a natural level of steroids. A study was done finding that 67recommended amount, and they stack (meaning they take two or more different kinds of steroids). Steroids are only meant to be used in small amounts to begin with. Anything over a normal dose goes unused. Also, no study has shown stacking to be beneficial.

Chapter 8

Drug Screens

Some chemicals taken orally supposedly will mask traces of drugs in urine. Advertisers like to present their diuretic as a masking agent to make the sale. Consequently, diuretics are often mistaken for drug screens. Most herbal products claim to do a lot more than they actually do. Do not be fooled by herbal potions that claim to flush or absorb toxins.

8.1 Drug Screens That Work

8.1.1 Aspirin

According to Jeff Nightbyrd, there is testing industry data that taking 4 aspirins a few hours prior to the test might help you. ". . . aspirin interferes with the Syvia [sic] EMIT assay. It seems that aspirin absorbs at the same wavelength that NAD does which is how it interferes with the assay" (Clin Chem 34 (90) 602-606). Two reliable sources have tested aspirin and found it to interfere with the EMIT. In the future they will try to find a way to circumvent this test flaw. Until then, I certainly recommend taking advantage of the situation and using aspirin.

8.2 Drug Screens That Do Not Work

8.2.1 Goldenseal

Goldenseal has shown to work on occasion. However, some labs are reportedly testing for Goldenseal. Goldenseal is very unreliable, and California NORML advises against using it. Goldenseal (as a screen) only works on the TLC test, which is not used anymore.

8.2.2 Niacin

Niacin has been shown to work on occasion. Byrd Labs tests conclude that niacin doesn't work at all. In other words, something else probably caused a negative, not the niacin.

8.2.3 Zinc Sulfate

Zinc sulfate is claimed to bond with THC metabolites, and because it's a solid, it gets passed as stool rather than urine. Jeff Nightbyrd says it does nothing. Anne Watters Pearson said "zinc sulfate is no miracle drug for pissing. Forget it."

8.3 Untested Drug Screens

8.3.1 Puri-Blend (c)

Puri-Blend is claimed to "block" metabolites from entering the bloodstream and to "neutralize" all drugs in the urine. I don't believe it myself. Sold in GNC stores.

8.3.2 The Stuff (c)

The Stuff is claimed to absorb toxins in the body and block detection of true and false positives. Sold by J&J Enterprises.

Chapter 9

Doping Samples

"Doping" samples consists of spiking the sample with different chemicals. Chemicals that defeat immunoglobulin/antigen binding will cause a false negative on the EMIT. Most of these additives only work on the standard EMIT screening, not on RIA or GC/MS tests. In many cases, passing the EMIT is good enough, because they will never do a RIA or GC/MS confirmation on a sample that showed negative. I should also add that you may be watched, so don't rely on this method. You should be able to find out ahead of time if you will be supervised. Some of the following additives alter the urine's pH, and most labs now test the pH to see if the sample has been adulterated. If you are subject to random tests, you may want to carry an additive in your wallet. Additives are illegal in the state of Texas, and commercial vendors will not ship their product to Texas addresses.

9.1 Effective Additives

The following additives are recommended.

9.1.1 Bleach (powdered)

Chlorinated bleach will test negative, and it's the best household additive. In an emergency, Jeff Nightbyrd recommends adding unscented bleach crystals to a diluted sample. It's recommended to grind the powdered bleach to a finer grain. 1/4 teaspoon is recommended for a 60cc sample. For liquid bleach, add six to ten drops. Bleach will throw the pH outside the normal

body range; so it may be apparent that the sample was tampered with. Some bleaches foam or leave residue, so experiment with different brands before selecting which to use.

9.1.2 Klear (c)

Klear is a powdered additive. Jeff Nightbyrd, Ann Waters Pearson, and Party Hut Enterprises currently endorses Klear. It was, until recently, the most advanced and least detectable. However, some labs can now detect Klear. Due to the popularity of Klear and many cases where people were caught using it, Jeff Nightbyrd recommends reverting back to UrinAid. Klear will clear up THC metabolites, as well as nicotine byproducts on the EMIT. If methamphetamines are present, Klear won't help. Klear is only designed to work on the EMIT. It will also work on the RIA when there is a good time span between the urine getting spiked, and getting tested. If the RIA test is not performed on-site, there is a good chance Klear will cause a false negative. Klear can be purchased from Martha Butterfield-Jay Foundation and Party Hut Enterprizes now carries. You can also get Klear direct from Klear (the organization).

9.1.3 Water

You can dilute your sample heavily with water. Don't confuse this with drinking water; you can also add water directly to the sample. Be sure to use hot water (between 91 and 97 degrees), they will likely take the temperature of the sample. This method is not dependable because some facilities have the sink water shut off to prevent people from doing this. If there is running water, they may listen to you. If you turn on the water, make it sound like you're washing your hands or something.

9.2 Ineffective Additives

These additives are not recommended. Many of these may give negative test results, but are not recommended for other reasons.

9.2.1 Ammonia

2 ounces will render the sample negative. The pH is altered, and the ammonia odor is strong enough to be recognized.

9.2.2 Blood

It's been said that a few drops of blood will fix your sample; it does not.

9.2.3 Draino

Draino will test negative. However, Draino is NOT recommended because it doesn't work well even when half a teaspoon is added. It colors the sample blue, and will put the pH outside the normal body range. Draino foams, and leaves metal specs that must be removed.

9.2.4 Goldenseal

A myth. Goldenseal put directly in the sample doesn't alter test results. It only turns the specimen brown. Do not dope your urine with Goldenseal. Goldenseal is more commonly used as a screen, to be consumed. See Goldenseal under section 7.2.1.

9.2.5 Hydrogen Peroxide

Industrial grade will destroy half the THC metabolites. Household strength hydrogen peroxide does nothing. 30THC metabolite into something that would not react in the screening test and would show up as something different by GC/MS" [Anon1].

9.2.6 Lemon Juice

Lemon juice is a myth; it will not change the test results.

9.2.7 Liquid Soap

Will test negative, but makes the specimen cloudy, which certainly draws suspicion.

9.2.8 Mary Jane's SuperClean 13 (c)

This additive was effective for a very short period. SuperClean had to be strong enough to beat the tests, but weak enough to be undetectable. It failed to cause a false-negative in 3tests. In fact, it also causes a false-positive on the EMIT for alcohol! Don't use it.

9.2.9 Purifyit (c)

Imported from Europe, Party Hut Enterprises sells Purifyit with a money-back guarantee. PHE claims there have been no returns. Oklahoma NORML refuses to endorse this product because it has flunked too many truck drivers.

9.2.10 Sodium Nitrate

This is more effective than table salt (below), but dissolves poorly.

9.2.11 Table Salt

Two tablespoons of salt will test negative, but puts the density out of normal range. Residue can also be seen at the bottom of the cup.

9.2.12 UrinAid (c)

UrinAid, produced by Byrd Labs, is very potent and works every time for masking pot and nicotine, but not cocaine or heroin. They have recently developed a test solely to detect UrinAid. UrinAid is tested for in 5this product because it's "too detectable."

9.2.13 Vinegar

Adding vinegar to your sample will test negative, but also drops the pH. In fact, lowering the pH is what causes the sample to test negative. "If the urine is extremely acidic or alkaline the antigen-antibody reaction will proceed at a slower rate which COULD produce a false negative" [Anon1]. This method is not recommended because if you are lucky and lower the pH enough to produce a negative, there's a chance that the pH itself will also be tested.

9.2.14 Visine

This is debatable. Byrd Labs concluded that Visine does not work. Clinton said that the lab he worked in tested Visine, and concluded that Visine works every time as a false negative for the EMIT. It can be detected due to inability of the sample to foam.

9.2.15 WD40

Another myth. WD40 can only do harm.

9.3 Untested Additives

9.3.1 Papain

This is a papaya enzyme available over the counter. It is not known whether this does anything. Dr. Grow said that Papain is an antibody to THC, and in theory may destroy THC when added to the urine sample. However, positive urine doesn't actually contain THC; it contains THC byproducts. Papain has not been tested, and may or may not work.

Chapter 10

Substitution

This method works for every urine test, every time (provided that some conditions are met). You simply give them clean urine (not yours). This works very well if you are not supervised. If you are going to be supervised, try to talk them out of it. Someone told me they were going to be monitored, and they said ”I don’t want you to fuckin’ watch me piss!” So the supervisor waited outside; probably with his/her ear to the door to listen for opening containers. Members in active duty are often watched as the urine flows from source to destination (but substitution will even work on this test, as you will find out). Abbie Hoffman, author of ”Stealing This Urine Test,” suggested leaving a few drops of urine on the seat or on your shoe for as ”an added measure of authenticity.”

10.1 Substitution Methods

There are three methods, but two of them are painful, and you have to be determined to use them. The most common way to sneak in urine is in a concealed container.

10.1.1 Concealed Container

Simply conceal the urine in a container. The first time you are alone with the container they give you, dump in your concealed urine. Be sure you can quietly open the container; the lab personnel may be just outside the door listening. You may be required to change into a gown. If so, a condom or

douche bag holding the sample and taped around the thigh can be concealed under the gown. You can also run a plastic line from a flexible container and tape it to your urination equipment (to be gender neutral), and even piss under supervision. Females have been known to keep a condom with the urine sample in the vagina, and prick it with a sharp fingernail to piss under supervision. Be sure to keep the sample between 91 and 97 degrees.

10.1.2 Injection

There is a way to use substitution even when you are under the strictest supervision. Athletes trying to pass tests for anabolic steroids have been known to empty their bladders, and have the substituted urine injected directly into their bladders via needle. It was shown in a motion picture like "Wildcats" I believe. While theoretically possible, it's painful and subject to infection. It would certainly be the most senseless way to get clean urine into the testees bladder. If this must be done, catheterization should be used.

10.1.3 Catheterization

First void your bladder as you would with injection. Run a thin plastic tube to the bladder. (Males must insert the tube into the opening of the penis, go through the urethra and into the bladder.) Catheterization done on females is not as unpleasant as it is for males. Then inject the clean urine into the bladder via catheter. Catheterization is less painful, safer, and more effective. Infection is still possible.

10.2 Where to Get Clean Urine

10.2.1 Urine From A Donor

You can substitute someone else's urine. Ask your urine donor (hopefully a friend you can trust) what drugs they've taken in the last month. They may have taken a false positive (or a true positive for that matter). Before the test, the examiner will likely ask you to list everything you've taken. If the urine ages beyond 18 hours, deterioration becomes noticable and the lab may suspect something.

10.2.2 Powdered Urine

If you don't trust your friend's sample, or don't have any clean friends, you can get powdered urine from Martha Butterfield-Jay Foundation. It's produced by Byrd Labs, and supposedly works perfectly; however, I got MBJF's powdered urine, and it did not specify the age or gender of the original sample. Powdered urine must be prepared ahead of time. If there is a period of time that you are clean, you can make powdered urine from your own supply.

10.2.3 .1 Making Your Own Powdered Urine

Urinate in a glass container. Let it evaporate. Then scrape the inside for the concentrate. Just mix it with water before the test, and the sample will have the correct specific gravity, pH, color, etc.

10.2.4 Dog Urine

I heard from Dr. Grow that dog urine (of all things) can be substituted, and will pass the test! However, I don't know how an age, gender, pH, or creatinine test would result. Someone was able to use dog urine for several months to pass the test. This subsection assumes you have a clean dog. I know my dog's urine wouldn't pass; he eats more weed than humans do. It would make more sense to use human urine, but dog urine provides a workable substitution in an emergency.

Chapter 11

Stealing Urine

Speaking of stealing, people have been known to get away with stealing their sample from the tray among many other urine samples. In the case that I heard, the person being tested never got the test results, and was hired for the job that he was tested for. They wouldn't dare ask someone to re-test because they "lost" his/her urine sample. Don't expect this method to work if you are being tested for the military or if you are on parole; they have no problem violating your rights repeatedly.

Chapter 12

If You Fail

If you fail the test, raise hell. Failing the drug test has been known to make a quiet person go ballistic. You will be interviewed by a medical review official (MRO), who would try to find out why you tested positive. MRO's are NOT impartial. An MRO is an employee of the lab, and is there for quality control. They are also there to protect the lab by coercing the court into thinking that the person who failed is a drug abuser. "Anything you say to an MRO can and will be used against you" (RDW). If you fight it, your lawyer "can subpoena the proficiency testing records of the laboratory for review" [Anon1]. These questions should be asked about the lab you are challenging:

- How does the lab handle samples?
- Are they NIDA/CAP certified?
- Do they participate in appropriate proficiency testing?
- Where are their track records in the proficiency testing program?
- Have they ever failed a proficiency test?
- What are the qualifications of the technical staff performing the test?
- What technologies do they use to screen and confirm?

"Conquering the Urine Tests" provides additional legal advice that will help you before taking a test, and if you fail a test.

Many employers no longer show lab results to employees. They just get rejected if seeking employment. Elderly employees are getting fired for failing the test; incidentally losing all of their pension benefits.

Laura Gibson, a medical doctor on the internet, tested positive and was not hired. She had a poppy seed bagel that morning, not knowing it was a false positive. She fought it to the point where they just decided to throw out the results and hire her anyway. But don't go taking it to court; it's virtually impossible to win this case.

If you're an adult, contact ACLU. If you're a child, don't bother; ACLU won't do anything for children who fail the drug test. Then mail me at `hbcsc096@csun.edu` and tell me what you tried so I can use that to help others. Many people ask for advice before the test, then do not report back.

Chapter 13

Who Drugtests?

In general, employers, parol officers, probation officers, police, health insurance companies, government agencies, the military, parents, and athletic organizations drug test.

13.1 Specifically, Which Companies Test, and Which Do Not?

There are too many companies to list in this document. An online searchable database called The Non-testers List[1] maintains a current list of companies that drug test and companies that do not.

The data contained in this list comes from reports by Internet users. So if you have first hand experience with a company, you should report it to the list operator. If you are drug tested by a company that is not listed, you can submit a report to the list operator, who will add it. If you have a good experience with a company that does not violate your privacy, please also report it to the list operator, who will provide good publicity for the company.

The usenet Just-Say-No-To-Piss-Tests Project[2] used to maintain a similar list of the drug testing policies of varies companies, but it has not been updated since 1994.

[1] more information provided in section A.2

[2] more information provided in section A.2

Chapter 14

Politics, Ethics, and Principles of Drug Testing

14.1 Why is Drug Testing Legal?

There are six stages to the policymaking process:

Issue Identification "Some event, persion, or group calls attention to a problem that needs government action" [Gitel, p.412].

Agenda Setting "The issue or problem is seriously considered by the policymaking institution" [Gitel, p.413].

Policy Formation "Someone must develop a proposal or program that can address the issue" [Gitel, p.413].

Policy Adoption "includes efforts to obtain enough support so that a proposal can become the government's stated policy" [Gitel, p.414].

Policy Implementation "The carrying out of policy mandates through public programs and actions." [Gitel, p.415].

Policy Evaluation "Looking at government actions and programs to see whether goals have been achieved to assess a policy's effectiveness and efficiency" [Gitel, p.416].

We are still at the first stage– issue identification. Most people are not even aware of the drug testing issue. Many people still believe that drug testing detects impairment, and few are aware of the better alternatives.

You might ask why the Constitution has not protected us from this privacy invasion to begin with. Drug testing is an unreasonable search, and it forces people to incriminate themselves. However, the Constitution does not apply to private organizations. This means when an employer searches you unreasonably, the government does not have to protect you using the Constitution as a basis.

In cases where the government drug tests, it does violate the 4th and 5th amendments.

14.2 The Workplace

It comes down to these values. An employer's right to know who s/he is hiring stands in conflict with an individual's right to privacy. I wrote this paper because I value the right to privacy more.

I also believe people should have the right to consume any substance they want (without limits), given that they are knowledgeable about that chemical. Employers, like anyone, have been affected by the Reefer Madness Movement. The government pushed massive amounts of misinformation throughout communities and schools, and employers are not informed enough yet to dictate what drugs will harm the workplace.

The only effective way to select workers is to evaluate their performance on the job.

First understand that drugs can actually improve performance. Aspirin relieves pain, allowing a worker to continue. Marijuana (when consumed on the job) makes repetitive factory oriented work more interesting, which lengthens a workers attention span. Marijuana will actually make some people more alert. After intensive testing, someone I know can solve the Rubix Cube 20 seconds faster when stoned. (not scientific proof, yet interesting). Stimulants will keep workers productive at the end of long work days.

Phil Smith summarizes an article in March 1990 Scientific American [SATC]:

> [The article] suggested that workers who tested positive for marijuana only: 1) cost less in health insurance benefits; 2) had a higher than average rate of promotion; 3) exhibited less absenteeism; and 4) were fired for cause less often than workers who did not test positive. Since marijuana is the most common illicit

> drug used by adults, and the one detected in up to 90 percent of all "positive" drug tests (half of which are false), this fact has radical implications for current public and employer policies.

I could hardly believe what I was reading, but this article did carry significant statistical evidence.

I see greater negative effects in drug testing than in drug use. In my opinion, drug testing is un-American because guilt is assumed until the test proves innocence. The peoples' civil liberties are suffering. This particular privacy intrusion costs businesses $1.2 billion a year for urinanalysis of their workers.

If the negative effects of drug use begin to show in the worker's performance, then let it be unsatisfactory performance that leads to corrective action, not suspicion of an unpopular lifestyle.

Nightbyrd has "counseled several, very straight, elderly workers - close to retirement - who were fired and lost their pension benefits because they 'failed their drug test'" (Jeff Nightbyrd).

14.3 Athletics

Bernard Williams of the Philadelphia Eagles failed the drug test for marijuana. He was suspended from the NFL for six games for using a drug that does not enhance performance. If anything, marijuana would detract from an athletes performance. Let the coach judge Williams performance.

The U.S. Supreme court just ruled June 1995 that public high schools can require drug test for all student athletes. Many high schools already do random searches on students; not for weapons, but for drugs. After all, the Constitution has failed to protect children in the classroom, why not expand? Students have lost 1st, 4th, and 5th amendment rights, and I think it is absurd. We have patriotic history teachers telling children of their Constitutional rights, yet children's rights are not protected on campus. Kids get kicked out of school for questioning rules that violate the Constitution.

14.4 Parenting

Now it is becoming commonplace for parents to drug test their children. Perfect; let's break up the families; cut down those lines of communication

and sneak around spying on our kids. Let's violate the child's privacy. We use DARE like the Salem witch hunts – to get children to turn their parents. Now with DrugAlert, parents have a weapon to use on their kids.

14.5 Discrimination Factor

It is important to consider the discrimination factor. People with dark skin may fail the urine test due to the false positive melanin. Drugs are detected easier in dark haired people when the hair test is used [Berns].

14.6 The Alternatives

Not all employers are Orwellian in nature. Many employers do not care what you do at home in your off-time; they just want to ensure that you are performing your best when you are at work. Out of ignorance, they think the way to ensure high performance is to test for drug use. Obviously it's not.

There is an alarming number false negatives and false positives in the drug testing industry. That's a fact. And what it means is that competent, law abiding workers are unfairly being denied employment and losing jobs. The employers evaluation of the employees competency is dependent on the competency of the lab. Even when the lab is competent, there are still false positives due to other factors, all of which are outside the control of the employee.

The fact that there are false negatives can lead to extremely severe disasters in safety critical applications. For example, the case below explained by an anonymous user:

> I'm the Director of a program that monitors nurses and other health professionals with chemical dependency. We recently had a nurse anesthetist who had clean screens for over six months and we approved her to return to anesthesia practice. Her first week on the job, two of her patients experienced complications during surgery because of her impaired practice and ended up in ICU in critical condition. I don't know if either one will regain neurological function. The nurse went back to treatment and we

> asked her what happened. She had been drinking and using the entire time...

So we have a situation where people assume that because someone passes a drug test, then they must be safe. The fact is, an airline pilot can snort a line of cocaine five minutes before a drug test and pass no problem; then step into the cockpit for a couple hour flight and be severely impaired.

It is impairment we want to test for – not lifestyle preference. This is where performance impairment tests comes in. Impairment tests use a computer to assess the employees hand-eye coordination, and a variety of other variables that are related to the task, not the lifestyle of the employee. The test only takes 30 seconds. It is superior to drug testing "in terms of cost, timeliness and accuracy of results, and overall liability" [Fine].

Now suppose a surgeon finds out his fourteen year old daughter is pregnant, then has to stay up all night with his sick two year old. He is in no condition to work the next morning; especially after just discovering that his stock took a dive as well. If he goes into work anyway, he will pass a drug test, but not the impairment test.

We are sacrificing too many important rights by allowing drug testing to continue. Until this unjust drug testing frenzy is put to an end, children, workers, military service people, and parolees need to learn how to protect themselves from the drug test.

14.7 How Can I Combat Drug Testing?

14.7.1 As a job seeker

Only consider employment from ethical companies. Support the companies that care about you enough to respect your privacy. If you decide to work for someone who drug tests, you are actively supporting their disrespectful privacy policy; you are actively supporting lifestyle discrimination, and you are actively supporting the drug testing industry – even if you use techniques in this paper to beat the test. If you seek employment from a company you are not sure about, and discover that they drug test, then decline the test and explain that you will not tolerate having your privacy violated and dignity stripped. Tell them you are drug free, and make it clear to them that they lost a good worker because of their intrusive policy.

14.7.2 As an employee

If you already have a job, then go to The Non-testers List [1] and verify that the company you work for is accurately listed. If it is not, then add it to either the good list or the black list. Ensuring the accuracy of this database is important to the cause.

If you work for a company that drug tests, consider working for a respectful employer instead.

14.7.3 As an employer

Whatever you do, do not drug test! Respect the privacy of your employees lifestyle, and do it with pride. Some companies that do not drug test post bulletins around the workplace which proudly state the companies privacy policy. Also, be sure to reward yourself by adding your company to The Non-Testers List [2] for free advertizing and positive publicity.

As an employer who has to manage safety critical applications, do not use drug tests to test for impairment. It does not work. This strategy leads to the elimination of drug-free workers (in cases of false positives), and it also fails to catch workers who are impaired (false negatives). False negatives can lead to disasters. Use impairment tests such as that developed by Performance Factors [3]. Impairment tests are not intrusive, they are more cost effective and take less time to administer, and they test impairment rather than lifestyle.

14.7.4 As a juror

If you ever serve as a juror for a case where someone is being charged for a drug offense, and a drug test is used as evidence, be aware of jury nullification. If sufficient evidence is submitted supporting a law you consider unjust, you have a right to vote not-guilty, simply because you disagree with the law. You may agree with the law, yet disagree with the punishment for that particular crime. If you feel the punishment will be too harsh, you also have the right to vote not-guilty. Vote your conscience. The court never tells the jurors of this undisclosed right, but it is there. The Fully Informed Jury Association is a good source for this information. Learn about FIJA in section A.2.

[1] more information in section A.2
[2] more information in section A.2
[3] more information in section A.2

14.7.5 An an activist

Distribute this document. Read the distribution rules in section 16, and make as many copies as you can distribute.

Chapter 15

About the Author

I have no medical or legal credentials. I have not even been drug tested myself (because I refuse). I am an activist against the War on [Some] Drugs, and I think that the government has taken the drug war to a ludicrous level.

NORML reports that every 9 seconds someone gets arrested for marijuana posession. NORML also reports that 28are there for drug related crimes. These people are not dangerous. They are there as victims of a witch hunt. Laws created by the legislature to protect me from myself demonstrate how totalitarian this country has become.

Incidentally, I have taken an interest in methods for beating an unjust system.

15.0.6 Contacting the Author

You may e-mail comments/corrections/suggestions to me. Send questions to the urine-test mailing list. This way several people including me will get the question, and I won't be burdened with having to reply to all the mass mail that I get. I probably will not be able to answer questions that this paper does not answer anyway. Here is my public key:


```
-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: 4.5
Comment: Top Secret Underground Transmittal

mQENAzL6vNABSAEIAK5f1ShtC2Q0tTMppXRsSsBNoFSocs+BxwTsMWREqYS4kxB5
```

```
Hr9lfo20aU3ksIklximU5hqa/um0aVtSrb9UyfC3aMBLoXLjj3bpnRlei4Knc4sX
v5XDY0hQDFbygewzE0lKxjZ90LcT4wpLIsxUJWzw8SY5XD5lVOWM1+Wd1B0CzQMY
A6Iq/bqJDVbk1fBdDH3EJ0zE1DZY3XbRT0dA9uB3Hp8mSjH8nVeh0paTcIs5guSa
j7LEimdH+/QyBo7UDQBysF7qnln/N0LpHb9ZzQadp6S6mYQpefJCS6e2zOPm0rwM
Jtjo/d1f0iEX36vJ9sfqMs+D2XuB0pgpZ3w0zycABRG0IEp1c3RpbiBHb21ib3Mg
PGpnb21ib3NAY3N1bi5lZHU+tBM8aGJjc2MwOTZAY3N1bi5lZHU+
=d137
-----END PGP PUBLIC KEY BLOCK-----
```


I encourage everyone to use encryption. Conventional email offers no protection from disclosure attacks (where someone reads your private mail). You may consider it paranoia to assume someone is monitoring your outgoing mail; however, it is perfectly reasonable to assume that someone is reading my incoming mail given the nature of my Internet personality. I use PGP[1] and I recommend that you do too.

Encryption may not be sufficient protection by itself. One who is monitoring my mail will not know what a PGP user is saying or what I am saying in response, but the eavesdropper does at least know **who** is talking to me, and that is not good.

So I also encourage the use of anonymous remailers[2]. Anonymous remailers provide a resonable degree of protection from anyone (even me) from finding out who you are. If you need a response from me, then you can still send me your message anonymously using a NYM service.

I assume everyone who contacts me wants to be anonymous, so I default to not publishing contributors names or addresses in the credits. If you provide me with information and want to be cited in the sources, tell me explicitly. Many of my readers are experts in the field. If you want to be available for consulting directly to the public, let me know and I will add your address to the sources.

Justin Gombos E-mail: ¡jgombos@csun.edu¿ Snail-Mail: 17950 Lassen St., #335, Northridge, CA 91330 URL: `http://www.csun.edu/~hbcsc096/dtq`

[1] more can be obtained about PGP in section A.2

[2] more information can be obtained about anonymous remailers in section A.2

Chapter 16

Distribution Rules

I am taking a Phillip Zimmerman approach. Our rights are in the line of fire from both government and private entities, and everyone needs to have free access to this information. I want it to become widespread before adversaries have a chance to stop it. Our current Congress is a threat to civil liberties, as they have been launching anti-expression policies — targeting the Internet.

Anyone may distribute **unmodified recent versions** of this document freely, provided that it is done **non–profit**.

One way to ensure that the copy you are distributing is unmodified is to get it directly from my web site. Before distribution, you should get my current PGP key and use PGP to validate my signature. This will ensure that no one tampered with the file.

One way to ensure that your version is recent is to compare the date and version number of your copy to that of the copy on my web page immediatly prior to distribution. Another way to ensure your version is recent is to add your email address to my distribution list. Do this by emailing me asking to be put on the distribution list. I will then notify you whenever a new version emerges. The latter approach is the only way to guarentee that you are publishing an up-to-date version via the web, or using some other form of continuous distribution.

Profitting from this text is prohibited.

Appendix A

Sources

A.1 Contributors

Thanks to everyone who contributed information! Many of my contributors use anonymous accounts, or have requested that I keep them anonymous.

anon1 Anonymous contributor #1 is a clinical biochemist/toxicologist working as the non-medical director of a small clinical laboratory. S/He holds three degrees: a masters in biochemistry, a bachelors in chemistry and an associates in medical laboratory technology and is certified as a Clinical Laboratory Scientist by NCA. S/He has worked in the clinical laboratory field for 18 years and specifically in drug testing labs for over fives years. In addition, s/he has been recognized as a expert before several states and the federal courts in matters relating to drug and alcohol testing and it effects on driving performance. S/He has testified for both the prosecution and defense so his testimony has been recognized as unbiased.

California NORML helped with information on detection times.

Clinton (not the U.S. president) Clinton has worked as a lab assistant in two drug testing lab's, and has other family members in the field. In usenet, Clinton is known as ZZYZX.

Dr. Grow studies molecular biology.

Nightbyrd, Jeff (founder of Byrd Labs) Nightbyrd is the author of the "Conquering the Urine Tests" pamphlet. His 11th edition was updated

in 1996 and is out via snail-mail for $5. The pamphlet provides some more elaborate information, and includes statistics and stories. Nightbyrd has worked several years on protecting workers civil rights, and a majority of my information comes from all the free consulting he has provided (he's practically a coauthor). If anyone has a related law suit underway, Mr. Nightbyrd has one of the most extensive libraries of materials in the country. (800) 480-2468; FAX (512) 478-7706.

Pearson, Anne Watters (founder of Martha Butterfield-Jay Foundation) Pearson is devoted to counseling and coaching people faced with piss testing. `oknorml@ix.netcom.com`.

Smith, Phillip Phillip Smith is a Portland NORML member who has helped edit this paper, making corrections on grammar and content.

A.2 For Additional Information

American Civil Liberties Union ACLU is a freedom network with information and legal resources to fight prohibition and protect the Constitution. (212) 944-9800 `http://www.aclu.org`

Anonymous Remailers To learn about the security of the different types of anonymous remailers, read my technical paper at `http://www.csun.edu/ hbcsc09` For non-technical information, read André Bacard's Anonymous Remailer FAQ at `http://www.well.com/user/abacard/remail.html`

Austin Nutritional Research Provides information about vitamins, herbs, and nutrients. `http://www.realtime.net/anr`

Byrd Labs Laboratories founded by Jeff Nightbyrd. Byrd labs has run more than 2,000 tests on urine and additives. They sell UrineAid, powdered urine, and Conquering the Urine Tests pamphlet. Byrd Products, 1390 North McDowel suite G#337, Petaluma, CA. (800) 333-2152

CAPP Hi tech workers rights organization. (512) 448-4804

Carson, Ed Book: Just Say No to Drug Tests: How to Beat the Whiz Quiz. ISBN 0-87364-624-X

Digit Press (GA) Info Line: (404) 924-1393

Drug Testing Hotline in California (900) 844-test

Drug Watch This page represents the position of drug testing advocates. It may provide you with some good entertainment :) `http://www.drugwatch.org`

Fully Informed Jury Association For free Jury Power Information Kit, call (800) TEL-JURY. FIJA national snail-mail: PO Box 59, Helmville, MT 59843. (406) 793-5550. Mr. Peyman (FIJA affiliate) (714) 838-2896. `http://intele.net/~harald/fija/fija_us.htm`

Hoffman, Abbie Book: Steal This Urine Test. ISBN 1568492928

Hyperreal Drug Testing Archives Links and articles related to drug testing. `http://hyperreal.com/drugs/politics/drug.testing`

J&J Enterprizes (aka Freedom Wholesalers). Distributes The Stuff and Naturally Klean Herbal Tea. Direct questions to (800) 883-3869. FAX orders to (303) 765-5732. Snail-Mail: PO Box 102311, Denver, CO 80250. http://www.imall.com/stores/stuff

Just-Say-No-To-Piss-Tests Project This is a list of drug testing policies of many companies (last updated in 1994). `gopher://gopher.well.sf.ca.us:70/00/Politic`

Klear (800) 661-1357

Legal Action Center (212) 243-1313

Martha Butterfield-Jay Foundation (Oklahoma NORML) MBJF sent me free literature, and a brochure on of their products. If you call, a machine will answer. Calls will be returned collect. PO Box 57214, Oklahoma City, OK 73157. (405) 521-URIN.

National Lawyers Guild (212) 614-6464

Non-Testers List The Hemperor maintains a searchable database that lists employers who do not drug test in one table, and a list of Orwellian employers who do drug test in another table. `http://www.geocities.com/CapitolHill/6443/n`

NORML NORML operates a Drug Testing & Information Hotline. I don't recommend this hotline. People have called this line needing important drug testing information in a hurry, only to get a recording. For the price, I would expect a live person. The charge is $2.95 per minute. 900/97-NORML. 1636 'R' St. N.W., 3rd Floor, Washington D.C. 20009

NORML Legal Referral (202) 483-5500

Party Hut Enterprises Distributor of Carbo Clean, Whizzies, and Klear. If you would like to have more information about this product or a catalog of the 100's of other products that they carry just e-mail Charles Alvis `calvis@icon.net` or `partyhut@paranoia.com`.

Performance Factors Makes video impairment test. 1746 Cole Blvd., Suite 265, Golden, CO 80401. (303) 271-0505 (415) 769-8300

PGP Pretty Good Privacy is the most widely accepted encryption software around. It offers military grade encryption. Download it from `http://www.pgpi.com`

PharmChem Laborities Inc. Boycott PharmChem for supplying the sweat patch. Jay Whitney or David Asheim can be reached at (415) 328-6200

Sampson Health Products E-mail: `sampson@itouch.net`. Snail mail: 901 Rhode Rd., Kyle, Texas 78640. (512) 376-2537 anytime to speak to an operator, leave message, or automated fax.

Testing Expert Witness Legal information. (615) 579-5425.

Zydot Unlimited, Inc. (800) 725-2481.

A.2.1 Drug Testing Consultants on the Net

chemist@drugtest.com These people are looking to answer tough questions. They say if they do not know an answer, they will research it for you.

Jeff Nightbyrd Consult Nightbyrd with any drug testing question. Legal issues are his specialty.

A.2.2 Drug Testing Mailing List

To subscribe, E-mail `listproc@calyx.net` with `subscribe urine-test Firstname Lastname` as the body. Nicholas Merrill maintains the mailing list as well as the following WEB page (which is saturated with information and links.)

`http://www.calyx.com/urine-test.html`.

A.2.3 Newsgroups

The following newsgroups may be of interest:

- alt.activism
- misc.activism.progressive
- alt.drugs
- rec.drugs.cannabis
- alt.drugs.culture
- rec.drugs.misc
- alt.drugs.pot
- rec.drugs.psychedelics
- talk.politics.drugs
- alt.privacy
- sci.techniques.testing.misc

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[Fine] Fine, Cory K. "Video tests are the new frontier in drug detection". Personnel Journel. June 1992. v71 n6 p148(9).

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[1] Latimer, Dean. "Hemp-Urinalysis 'Myth' Probed: at Kentucky Hemp Feast, Urine Samples on the Side". High Times. Jan. 22, 1999. `http://www.hightimes.com/ht/new/9901/urinalysis.html`

[2] Macdonald, Scott. "The Role of Drugs in Workplace Injuries: is Drug Testing Appropriate?". Journal of Drug Issues. Fall 1995 v25 n4 p703(20)

[SATC] "Science and the Citizen". Scientific American March 1990. pp.18,22 `http://www.pdxnorml.org/test.html`

[Thein] Thein, Lori A.; Thein, Jill M.; Landry, Gregory L. "Ergogenic Aids. Special Series: Pharmacology." Physical Therapy. May, 1995. p. 426